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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/753,463	01/09/2004	Yasuo Fujimoto	2244.0160000	6417

26111 7590 03/15/2007

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EXAMINER	
CHEN, TIANJIE	
ART UNIT	PAPER NUMBER
2627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/15/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/753,463	FUJIMOTO, YASUO	
	Examiner	Art Unit	
	Tianjie Chen	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,14,15 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,14,15 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Final Rejection

1. Applicant's IDS filed 02/202/2007 provides new ground for rejection. The finality of that action and the allowance of claim 7 and 17 are withdrawn.

2. Applicant's submission on 03/05/2005 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al (US 2003/0193752) in view of Takagi et al (US 2001/0008475) and Takeuchi et al (JP 62-279570).

Claim 1, Takahashi et al shows a magnetic head suspension in Fig. 3A including: a flexure 3 ([0042]) having a magnetic head mounting region; a load beam portion 2 ([0040]) connected to the flexure, and a base portion 30 connected to a rear region of the load-bent portion, the member forming the load beam portion has a reinforcing structure 17 that is symmetrical as viewed from the above based on a center longitudinal axis line, only in a center region in a longitudinal direction from a rearmost portion at the rear region to the distal end.

Takagi et al shows a magnetic head suspension in Figs. 1 and 2, which has a dimple 51 ([0046]) at a portion corresponding to the magnetic head mounting region, a load-bent portion 41 ([0042]) generating a load for pressing a magnetic head to a

magnetic disk via the load beam portion, the load-bent portion being formed by a member separate from a member forming the load beam portion.

Takagi et al teaches that using separate load beam bent portion is to obtain the necessary performance for the suspension, therefore suitable materials, thicknesses, etc. may be selected individually for rigid portion and spring portion ([0015]). Furthermore, Takahashi et al does not specify the connection of the flexure and the head-mounting portion. Takagi et al shows a dimple for connecting these two parts and it is also a commonly used structure in the art. One of ordinary skill in the art would have been motivated to apply Takagi et al's beam-bent portion and dimple into Takahashi et al's device in order to obtain higher performance.

Takeuchi et al shows a magnetic head suspension in Fig. 2, wherein the member forming the load beam portion has a hollow opening 6a (Fig. 2C, p.442, right lower column, line 3); and a reinforcing structure 6, which is symmetrical as viewed from the above based on a center longitudinal axis line, and is in the form of a flange structure provided at left and right symmetrical internal sides of the member forming the load beam portion, the internal sides defining the hollow opening 6a.

Takeuchi et al teaches that this structure provides stability of performance for it suppresses oscillation response of the load beam due to a wind accompanied with the rotation of the magnetic disk to stabilize the floatation of the magnetic head (PURPOSE SECTION in English translation). One of ordinary skill in the art would have been motivated to add this structure onto Takahashi et al's device to stabilize the magnetic head.

Claim 2, Takeuchi et al shows that the member forming the load beam portion has a longitudinal length L from the rearmost portion to the dimple, and the

reinforcing structure is provided within a range of +0.25L from a longitudinal center position located at L/2 from the rearmost portion. Applicant's claim language does not exclude the flange exist out off this region.

Claim 3, Takahashi et al further shows that the longitudinal length of the reinforcing structure is 0.04 to 0.4L.

Claims 14, 15, and 17; Takagi et al further shows in Figs. 1 and 2 that the member forming the load beam portion includes: a rear region connected to a front region of the load-bent portion; an intermediate region extending from the rear region toward the distal end; and a front region extending from the intermediate region toward the distal end and reaching the magnetic head mounting region; the rear region has: a rear short beam extending along a width direction; and a pair of rear side beams extending from both ends of the rear short beam to the distal end of the load beam portion and inclined toward the distal end of the load beam portion so as to come close to the center longitudinal axis line of the load beam portion, the intermediate region has a pair of intermediate side beams extending from the distal end of the pair of rear beams to the distal end of the load beam portion and inclined to be in parallel with the center longitudinal axis line of the load beam portion or inclined toward the distal end of the load beam so as to come close to the center longitudinal axis line of the load beam portion, and the rear beam has an angle of inclination to the center longitudinal axis line of the load beam larger than that of the intermediate side beam.

Takagi et al teaches that by using this structure the load beam is reduced in weight, and its frequency and vibration characteristics are improved ([0019]). One of ordinary skill in the art would have been motivated to apply Takagi et al's structure to

Takahashi et al's device in order to reduce weight and improve frequency characteristics.

Response to Arguments

4. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Applicant's submission of an information disclosure statement under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p) on 02/02/2007 prompted the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 609.04(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tianjie Chen whose telephone number is 571-272-7570. The examiner can normally be reached on 8:00-4:30, Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 571-272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chen Tianjie

TIANJIE CHEN
PRIMARY EXAMINER